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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,036	03/16/2001	Mark Allmen	37112-167615	5594

26694 7590 02/28/2005

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EXAMINER

SENFİ, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/809,036	ALLMEN ET AL.	
	Examiner	Art Unit	
	Behrooz Senfi	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/17/2004, fwd 12/15/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-29 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments (filed 9/17/2004, fwd 12/15/2004) have been fully considered but are moot in view of the new ground(s) of rejection.

Applicant's amends independent claims 1, 18, 19 and 27.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4 – 9, 11, 16 – 20 and 25 – 27, are rejected under 35 U.S.C. 102(e) as being anticipated by Yang (US 6,490,319).

Regarding claims 1 and 18, Yang '319 discloses, "video sequence comprising Background and foreground, encoding the video sequence based on balancing bits per pixel for the background with bits per pixel for the foreground to achieve similar quality between the background and foreground" (i.e. fig. 4, col. 1, lines 29 – 60 and lines 65 - col. 2, lines 7, col. 3, lines 33 – 42).

Regarding claims 4 and 7, Yang '319 discloses, "balancing factor in claim 4" (i.e. col. 3, lines 55 – 65) and "bit budget in claim 7" (i.e. col. 5, lines 15 – 20).

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Regarding claims 8 – 9, 11 and 20, Yang '319 discloses, “background quantization step for the background composite based on a number of bits for a compressed background composite and an actual number of bits for the compressed background, in claim 8” and “determining a starting foreground quantization step for the foreground in claim 11” (i.e. col. 3, lines 33 – 42), and “iterative processing/encoding in claims 9 and 20” reads on (i.e. fig. 4).

Regarding claims 16 – 17 and 25 - 26, as for the “computer system” please see (i.e. fig. 3).

Regarding claims 19 and 27, the limitations claimed are substantially similar to claims 1 and 11, therefore the grounds for rejecting claims 1 and 11 also applies here.

Regarding claims 5 – 6, the limitations claimed “correction factor” and “quality factor” reads on quantization rate controller as discussed above to achieve similar quality between background and foreground.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 10, 12 – 15, 21 – 24 and 28 - 29, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang '319 in view of Ryoo (US 5,990,957).

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Regarding claims 15 and 24, Yang '319 teaches, "encoding the video sequence based on balancing bits per pixel for the background with bits per pixel for the foreground to achieve similar quality between the background and foreground" as discussed in claim 1 (i.e. fig. 4, col. 1, lines 29 – 60 and lines 65 - col. 2, lines 7, col. 3, lines 33 – 42). Yang '319 fails to particularly show the claimed "frame dropping". However, such features are well known and used as evidenced by Ryoo '957 (i.e. col. 7, lines 20 – 34) where teaches estimation of the bit rates by determining the block variance and skipping. Therefore, taking the combined teaching of Yang '319 and Ryoo '957 as a whole, it would have been obvious to one skilled in the art at the time of the invention was made to modify Yang '319 video coding to estimate bit rates by determining the picture/block variance and skipping as taught by Ryoo '957. Doing so would control and allocate appropriate bit amount to each video object (col. 2, lines 6 – 11 of Ryoo).

Regarding claim 3, combination of Yang '319 and Ryoo '957 teach "shape/texture" (i.e. col. 4, lines 6 – 11, MPEG-4).

Regarding claims 10 and 21, combination of Yang '319 and Ryoo '957 teach "estimating number of bits" (i.e. col. 7, lines 8 – 15).

Regarding claims 12 – 14, 22 – 23 and 28 – 29, combination of Yang '319 and Ryoo '957 as a whole teaches, the claimed "frame dropping and sub-sampling and bit budget" (i.e. col. 11, lines 45+ and col. 7, lines 20 - 34 of Ryoo).

Allowable Subject Matter

6. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. S.

2/18/2005


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600